

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/524,329 04/11/2005		04/1 1/2005	Nicolai Papke	05587-00376-US 6956		
23416	7590	03/14/2006		EXAMINER		
CONNOLL	Y BOVE	E LODGE & HUT.	SZEKEL	SZEKELY, PETER A		
P O BOX 22 WILMINGT		19899	ART UNIT	PAPER NUMBER		
	•			1714		

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

y
U

	Application No.	Applicant(s)						
	10/524,329	PAPKE, NICOLAI						
Office Action Summary	Examiner	Art Unit						
	Peter Szekely	1714						
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠ Responsive to communication(s) filed on 11 Fe	ebruary 2005.							
	action is non-final.							
· <u> </u>	,—							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-11</u> is/are rejected.	•							
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or	8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers								
9) The specification is objected to by the Examiner.								
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) Notice of References Cited (PTO-892)	4) Interview Summary							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)						
Paper No(s)/Mail Date <u>2/11/05</u> .	6) Other:	,						

Application/Control Number: 10/524,329 Page 2

Art Unit: 1714

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2. Claims 5 and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not known whether the molecular weights of the compatibilizer are expressed as weight average, number average, viscosity average, peak average or Z average molecular weights.
- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 4. Claims 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Claim 4 is rendered indefinite by the phrase "where appropriate". "Optionally" is acceptable. Furthermore, the word "oder" appears about ten ties in the claims, which is a German word and has no clear meaning in the claim. Claims 5 and 6 are rejected because they do not specify the average molecular weight used to express the molecular weight of the compatibilizer.

Application/Control Number: 10/524,329 Page 3

Art Unit: 1714

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The use of a composition is not patentable.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 1-4, 7, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Burg et al. 3,642,940 or Flexman 5,344,882.
- 10. Burg et al. disclose polyacetal, graft copolymer and polymethyl methacrylate, with their concentrations in claim 1. Films and moldings are shown in column 5, lines 48-57. Flexman teaches a blend consisting essentially of polyacetal, polyurethane and polyalkylene terephthalate containing an ethylene copolymer, which copolymer is an ethylene-butyl acrylate-glycidyl (meth)acrylate terpolymer. See claims 1-3, 10 and 11. Concentrations are shown in the same claims. Moldings are claimed in claim 14. For films see column 9, lines 60-68. Applicant's claims are not novel.

Application/Control Number: 10/524,329 Page 4

Art Unit: 1714

Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 1-4 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burg et al. 3,642,940 or Flexman 5,344,882, in view of Burg et al. 5,039,741 or Tanigawa et al. 6,399,699.
- 13. The primary references have been discussed already. Burg et al. reveal polyoxymethylene blended with the core-shell copolymer claimed by applicant in claims 1-11. Tanigawa et al. display polyacetal catalyzed by boron trifluoride in claim 1. It would have been obvious to one having ordinary skill in the art; at the time the invention was made, to use the core-shell polymer as the impact modifier in the compositions of the primary references in order to toughen the polymer blend and to use a polyacetal resin catalyzed by boron trifluoride, which has excellent aging resistance.
- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Szekely Primary Examiner Art Unit 1714

P.S. 3/6/06